

**DIVISION OF ENVIRONMENTAL HEALTH
SOLID WASTE PROGRAM
610 UNIVERSITY AVENUE
FAIRBANKS, ALASKA 99709-3643**
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File Number: 104.15.002

February 23, 1999

CERTIFIED MAIL, RETURN RECEIPT REQUESTED # Z 433 736 492

Mr. Stephen Lang
Fairbanks Gold Mining, Inc.
P.O. Box 73726
Fairbanks, Alaska 99707-3726

**Re: Fort Knox Mine Inert Waste Landfills, Solid Waste Disposal Permit 9931-BA001,
Renewal of Permit 9431-BA003**

Dear Mr. Lang:

The Department of Environmental Conservation has completed its evaluation of your application for a solid waste disposal permit for the development and operation of four landfills for construction and demolition debris and associated wastes, located at the Fort Knox Mine Project, and is issuing the enclosed permit in accordance with AS 46, 18 AAC 15, and 18 AAC 60.

Please review the conditions and stipulations in the permit and ensure they are all understood. This permit is effective upon issuance and expires February 15, 2004.

Any person who disagrees with this decision may appeal the decision by requesting an adjudicatory hearing, using the procedures contained in 18 AAC 15.200-310. Hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Juneau Alaska 99801-1795, within 30 days of receipt of this letter. If a hearing is not requested within 30 days, the right to appeal is waived. Even if an adjudicatory hearing has been requested and granted, all permit conditions remain in full force and effect. Please also send a copy of the request to the undersigned.

Sincerely,

Kris McCumby
for Heather Stockard
Solid Waste Program Manager

NS/KM/mlg (EH/SW/FBKS – K:\EH\SW\1999\9931-BA001.doc)

Enclosure: Permit #9931-BA001

Cc w/encl: Mayor, Fairbanks North Star Borough
Al Ott, ADF&G/Fairbanks
Bill Jeffers, Fairbanks Gold Mining, Inc.

Dick LeFebvre, ADNR/Anchorage
Robert Layne, ADNR/Fairbanks

Bcc: Sharmon Stambaugh

**ALASKA DEPARTMENT
OF
ENVIRONMENTAL CONSERVATION
NORTHERN REGIONAL OFFICE
610 UNIVERSITY AVENUE
FAIRBANKS, ALASKA 99709-3643**

SOLID WASTE DISPOSAL PERMIT

Permit 9931-BA001

Date: February 23, 1999

This Solid Waste Disposal Permit is issued to Fairbanks Gold Mining, Inc. P.O. Box 73726, Fairbanks, Alaska 99707-3726, for the construction, operation, and maintenance of construction, demolition, and industrial waste landfill sites within the boundaries of the Fort Knox Mine Project. The Fort Knox Mine Project is located approximately 25 miles northeast of Fairbanks, Alaska, in the upper headwaters of Fish Creek valley. Four sites will be used for disposal of wastes; one west of the conveyor drive tower, referred to as the Barnes Creek site, is within Section 16, T.2N., R.2E., Fairbanks Meridian; one below the north end of the tailing impoundment dam, referred to as the tailing dam site, is within Section 14, T.2N., R.2E., Fairbanks Meridian; one northeast of the mine pit, referred to as the Melba-Monte site, is within Section 16, T.2N., R.2E., Fairbanks Meridian; and one between the administration building and the tailing basin, referred to as Shop/Office/Warehouse (S/O/W) site, is within Sections 15 and 16, T.2N., R.2E., Fairbanks Meridian. This permit is subject to the conditions and stipulations in the following Appendices:

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This permit is issued under the provisions of Alaska Statute 46.03, and the Alaska Administrative Code, as amended or revised, and other applicable state laws and regulations.

This permit is effective upon issuance and expires February 15, 2004. It may be terminated or modified in accordance with AS 46.03.120.

Kris McCumby
for Heather Stockard
Solid Waste Program Manager

APPENDIX A - SITE DEVELOPMENT

I. SITE PREPARATION

The permit holder shall:

- A. Comply the designs and plans in the application dated January 4, 1999 and as amended in the letter of February 8, 1999 which includes the following documents: Fort Knox Solid Waste Management Plan, dated February 1999 and Waste Disposal Procedures, dated October 1997. Additional modifications may be requested by the permittee, but must be authorized by a permit amendment, before that modification is effective.
- B. Ensure that all operations will accommodate the waste volume and are done in a manner that will facilitate close out when the landfill is closed.
- C. Erect and maintain suitable barriers to control any blowing waste as needed.
- D. Erect and maintain readily visible signs in the facility directing users to the active dumping points for the construction and demolition debris. Pertinent rules for landfill use and contact information should be posted or provided to all employees.
- E. Ensure that surface water runoff from outside the facility does not flow onto the facility and over, into, or through uncovered or covered solid wastes by constructing and maintaining diversion structures such as ditches or berms.
- F. Ensure wildlife and domestic animals are not allowed access to the waste deposited at the facility and that the site be maintained to prevent being an attraction to them. Erect and maintain suitable devices as necessary to keep scavenging animals out of the site.

APPENDIX B - SITE OPERATIONS

I. GENERAL OPERATING PROCEDURES

The permit holder shall:

- A. Ensure that only construction, demolition, wood, brush, vehicle parts and accessories, and transportation debris and other solid wastes generated for the Fort Knox Mine Project including boxes, banding, pallets and road construction wastes are disposed of at this site.
- B. Operate the Barnes Creek, S/W/O and Melba-Monte landfills during construction, operation and closure of the Fort Knox Project. Operation of the tailing dam site landfill is only for wastes generated by construction and closure phases of the tailing and freshwater dams.
- C. Ensure that all non-salvageable drums, tanks, and associated piping are empty of fluids prior to crushing and burying. Remove all fluids from drums, tanks, and associated piping prior to disposal and properly dispose of in accordance with all applicable State and Federal laws, including but not limited to, RCRA, the Clean Water Act, the Clean Air Act, Title 46 of Alaska Statutes, 18 AAC 60, and Solid Waste Disposal Permit 9931-BA003, Fort Knox Mine Tailing Disposal. Ensure that all large containers (e.g., cleaned drums and tanks) are crushed and flattened to prevent voids in the fill.
- D. Ensure oil filters are gravity hot-drained¹ prior to disposal using one of the following methods:
 - 1. Puncturing the filter anti-drain back valve or the filter dome end and hot draining;
 - 2. Hot-draining and crushing;
 - 3. Dismantling and hot-draining; or
 - 4. Any other equivalent hot-draining method that will remove used oil.
- E. Ensure that all vehicles have been drained of fluids and petroleum products prior to burying. Collected fluids will be disposed of using appropriate methods.

¹ Hot-drained means that the oil filter is drained near engine operating temperature and above room temperature (i.e., 60 degrees Fahrenheit). Draining must occur for a minimum 12-hour time period and no free liquids shall remain when the filter is turned plate down.

I. GENERAL OPERATING PROCEDURES (cont.)

- F. Dispose of tires only in the Barnes and Yellow Pup rock dumps. Tires may be stacked up to four high and then must be incorporated into the rock dump.
- G. Survey in each trench to known permanent survey monuments within the project boundaries.
- H. Institute vector control measures as necessary (for flies, rodents, etc.) to ensure such organisms do not become a nuisance or hazard to health.
- I. Ensure that vehicles/contractors using the solid waste disposal facilities arrive with secured loads in order to reduce litter problems.

II. BURIAL

The permit holder shall:

- A. Consolidate and compact all loose waste. Solid waste should be compacted in two-foot increments before applying operational or final cover.
- B. Cover all waste materials in the working face with a minimum of six inches of compacted soil at least twice yearly during the spring and fall and as needed to prevent blowing litter or animal attraction.
- C. Cover all light debris (e.g. paper, foam, packing materials), which could blow away from the working face, within twenty-four hours of deposition.
- D. Maintain a minimum separation of 50 feet between the designated portion of the landfill and the boundary of the facility.
- E. Ensure sufficient cover material is available to provide cover if necessary during the winter months. In the event of a shortage of cover material, the applicant will notify the Department and a short term plan will be developed.
- F. Ensure that at each site, the maximum landfill working face width shall not exceed 20 feet, and the length shall not exceed 150 feet. The maximum height of the working face shall not exceed 10 feet.
- G. Ensure that each working face is kept as small as practical to reduce the potential for any windblown litter and for the attraction of birds and animals.
- H. Ensure that solid wastes are not placed in surface waters and that a minimum separation of ten feet is maintained between the existing or expected high groundwater table and the bottom of the fill area.

II. BURIAL (cont.)

- I. Ensure that an intermediate cover of at least 12 inches is applied within 7 days after the last waste is deposited in each trench.
- J. Ensure that covered areas and drainage control structures are graded in the completed landfill areas so as to promote surface water runoff without erosion, and to minimize the amount of water entering into the solid waste.

III. BURNING

The permit holder shall:

- A. Prohibit open burning on the working face. Immediately extinguish all fires that accidentally occur at the facility. Notify the Department of Environmental Conservation, Solid Waste Program, Fairbanks office, at 451-2108, if any fires occur on the working face.
- B. Ensure open burning complies with air quality regulations in 18 AAC 50 and all other applicable state and federal regulations.
- C. Ensure that open burning is conducted at the burn pit site at the S/O/W landfill with an attendant present.
- D. Ensure open burning at the burn pit is limited to pallets, cyanide bag boxes, and cardboard from the shipping of blasting supplies. Open burning of debris from land clearing will be allowed.
- E. Burn oily rags, office paper, and putrescible wastes in incinerators that comply with air quality regulations in 18 AAC 50.

IV. ACCESS

The permit holder shall:

- A. The permittee shall construct and maintain onsite roads as necessary to assure adequate traffic control. Adequate traffic control means that the site supervisor will maintain positive control of all persons who are within the landfill boundaries and that refuse will be deposited in approved locations. Dumping in unauthorized areas violates conditions of this permit and Alaska Administrative Codes.

V. LITTER

The permit holder shall:

- A. The permittee shall collect all windblown and littered refuse from within the disposal site, along access roads, and on lands within 1000 feet of the site, whether windblown or dumped.
- B. Collect and dispose of litter, on a monthly basis at a minimum, during snow-free months (May-October) or more frequently, if necessary, to prevent litter from becoming an aesthetic nuisance. A clean-up of any winter's accumulation of windblown litter shall be accomplished within two weeks after snow has melted in the spring.

VI. PROHIBITIONS AND SPECIAL RESTRICTIONS

The permit holder shall:

- A. Prohibit the disposal of putrescible wastes at the landfill.
- B. Prohibit discharge of firearms at the solid waste disposal facilities.
- C. Prohibit disposal of hazardous wastes, as defined in 40 CFR 261.3, oily wastes, waste oil, greases, paints, sludges, and chemical wastes at this facility, unless written permission is obtained from the Department.
- D. Prohibit disposal of lead-acid vehicle batteries at the landfill site. Temporary storage in a designated area (in covered, leak-proof containers) prior to transport to an acceptable recycle or disposal site is permitted.
- E. Prohibit storage of barrels containing waste petroleum products or antifreeze in landfill cells. Barrels containing such wastes must be stored, in a secure lined and bermed area located away from the landfill disposal cells.

VI. PROHIBITIONS AND SPECIAL RESTRICTIONS (cont.)

- F. Prohibit the disposal of contaminated soil which contains metals, or other chemicals in concentrations which the Department determines poses an unacceptable risk to human health or the environment. "Contaminated soil" means, for purposes of this permit and for purposes of ultimate disposal, soil and residue that is not a hazardous waste under 18 AAC 62 and that meets any of the following criteria:
1. contains concentrations of hazardous substances exceeding one or more of the applicable migration to groundwater levels set in 18 AAC 75.341 Table B1 or Table B2;
 2. exhibits the characteristic of toxicity described in 40 C.F.R. 261.24(a); or
 3. is determined by the department under 18 AAC 75 to pose a migration to surface water threat. Soil that is not contaminated by this definition may be considered contaminated soil under 18 AAC 75.
- G. Prohibit disposal of regulated asbestos containing materials at this site.

VII. RESOURCE CONSERVATION AND RECOVERY

The permit holder shall:

- A. Establish separate recyclable goods areas for items such as scrap metals and vehicle batteries. Recyclable goods shall be stored in a safe and sanitary way that prevents a litter violation under AS 46.06.080 and prevents a health hazard.
- B. Establish separate recyclable goods areas for items such as scrap metals and vehicle batteries. Recyclable goods may be stockpiled onsite prior to removal to an appropriate recycling facility and storage must be done in a safe and sanitary manner to prevent a litter violation.
- C. Ensure that used oils and oily wastes are managed in accordance with 40 CFR 279 and 40 CFR 261.

APPENDIX C - MONITORING AND REPORTING

I. GENERAL MONITORING REQUIREMENTS

The permit holder shall:

- A. Visually monitor active trenches and record the results of the inspection at each disposal site during each month of operation, for signs of damage or potential damage from settlement, ponding, leakage, erosion, or operations at the site. Retain the results of visual monitoring in the operating record for the facility.
- B. Maintain a set of site development and use plans and submit an updated copy to the Department showing current status on or before the permit anniversary date each year.

II. WATER MONITORING REQUIREMENTS

The permit holder shall:

- A. Comply with the surface water and groundwater monitoring requirements in Solid Waste Disposal Permit 9931-BA003, Fort Knox Mine Tailing Disposal.

APPENDIX D - SITE CLOSURE

I. CLOSURE AND POST-CLOSURE REQUIREMENTS

The permit holder shall:

- A. Notify the Department's Northern Regional Office at least 60 days before the site is to be permanently closed and equipment
- B. Ensure that a final cover is applied within 90 days after the last waste is deposited at any landfill. The final cover consists of a minimum of two feet of earthen material the top six inches of which will promote adequate water retention for the successful revegetation of the site with native vegetation or grasses.
- C. Develop a vegetative cover plan for closed areas within the first growing season using plant species recommended by the Alaska Plant Materials Center (907) 745-4469.
- D. Prepare and submit to the Department, within 60 days of closure of the facility a survey as-built or record drawings which show the location, waste types (tires, crushed barrels, ash, etc.), and volume of waste deposited at the facility.
- E. Within 60 days after the entire facility has been permanently closed to landfilling, file the survey as-built or record drawings of the area used as a landfill with the appropriate land records office, along with a notation informing future property owners that
 - 1. the property was used as a landfill;
 - 2. the types of wastes placed at the landfill;
 - 3. the geographical boundaries of the landfill; and
 - 4. details of any final cover, cap or other structures installed as part of closure.Submit proof of such recording to this Department.
- F. Visually monitor the closed landfill site each year for the first 5 years following closure for signs of damage or potential damage from settlement, ponding, leakage, erosion, or lack of success with revegetation at the site. Complete additional surface restoration work if significant problems have occurred within the post-closure period.

I. CLOSURE AND POST-CLOSURE REQUIREMENTS (cont.)

G. Submit a report to the Department at the end of the 5-year post-closure period, that contains

1. photographs of the facility; and
2. a description of any problems detected and corrective actions taken during post-closure visual monitoring.

H. Follow the Fort Knox Project Reclamation Plan as approved by the Alaska Department of Natural Resources and U.S. Army Corps of Engineers.

II. PROOF OF FINANCIAL RESPONSIBILITY FOR CLOSURE

The permit holder shall:

A. Ensure the financial responsibility provided for Solid Waste Disposal Permit 9931-BA003 apply to the activities performed in this permit.

APPENDIX E - REMEDIAL ACTIONS

I. WATER QUALITY VIOLATIONS

If a significant change is detected in the water quality of the monitoring wells over the background levels, the permit holder shall:

- A. Determine the extent of the contamination.
- B. Implement an investigative plan approved by the Department, to determine if migration of waste or leachate from the site is the cause of the change in water quality.
- C. Evaluate the potential for a violation of the water quality standards caused by leachate or waste from the facility.
- D. Submit a plan to the Department for corrective actions to prevent a violation of water quality standards.
- E. Implement the corrective action plan as approved by the Department.

II. SOLID WASTE MANAGEMENT VIOLATIONS

If wastes are disposed in violation of the stipulations of this permit, the permit holder shall:

- A. Remove and properly dispose of unacceptable wastes using cleanup plan approved by the Department.

APPENDIX F - GENERAL PERMIT CONDITIONS

I. ACCESS AND INSPECTION

The permittee shall allow the Commissioner or her/his representative access to the permitted facilities at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, State laws, and regulations.

II. INFORMATION ACCESS

Except for information relating to confidential processes or methods of manufacture, all records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the State of Alaska Department of Environmental Conservation, Fairbanks Office, 610 University Avenue, Fairbanks, Alaska 99709-3643.

III. CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control including, but not limited to, accidents, equipment breakdowns, or labor disputes.

IV. AVAILABILITY

The permittee shall post or maintain a copy of this permit available to the public at the disposal facility.

V. ADVERSE IMPACT

The permittee shall take all necessary means to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this permit, including any additional monitoring needed to determine the nature and impact of the noncomplying activity. The permittee shall cleanup and restore all areas adversely impacted by the noncompliance.

VI. CULTURAL OR PALEONTOLOGICAL RESOURCES

Should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (907- 269-8721).

VII. APPLICATIONS FOR RENEWAL

In accordance with 18 AAC 15.100(d), applications for renewal or amendment of this permit must be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

VIII. OTHER LEGAL OBLIGATIONS

The requirements, duties, and obligations set forth in this permit are in addition to any

requirements, duties, or obligations contained in any permit that the Alaska Department of Environmental Conservation or the U.S. Environmental Protection Agency has issued or may issue to the permittee. This permit does not relieve the permittee from the duty to obtain any and all necessary permits and to comply with the requirements contained in any such permit or with applicable state and federal laws and regulations. All activities conducted by the permittee pursuant to the terms of this permit and all plans implemented by the permittee pursuant to the terms of this permit shall comply with all applicable state and federal laws and regulations.

IX. TRANSFER OF OWNERSHIP

In the event of any change in control or ownership of the permitted facility, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the ADEC Solid Waste Program. The original permittee remains responsible for permit compliance unless and until the succeeding owner or controller agrees in writing to assume such responsibility, and the Department approves assignment of the permit. The Department will not unreasonably withhold such approval.

No transfer of this permit shall relieve the permittee of any liability arising out of operations conducted prior to such transfer, regardless of whether such liability accrues before or after such transfer.

X. POLLUTION PREVENTION

In order to prevent and minimize present and future pollution, when making management decisions that affect waste generation, the permittee shall consider the following order of priority options: waste source reduction; recycling of waste; waste treatment; and waste disposal.